

.....

Hydro Geo & Environmental, Inc
8525 SW 67th Avenue
Portland, OR 97223
Phone: 503. 892.2000
Fax:503.246.6021
e-mail: hydrogeo@comcast.net

Hydro Geo & Environmental, Inc.

May 7, 2023
Project#3251.22(9900)
Attn: Jessica Lind
c/o Foundation First NW, LLC
Attn: Joe Smith

MEMO

RE: Stabilization of residence @ 9900 NW Hoge Ave., Portland, Oregon, 97231

Subject: Alternative to helical pile application

Based on your authorization we have visited the subject site on May 5, 2023 during subgrade stabilization work for the existing residence. The construction crew hand-dug 4 pits under the footing along the backwall (northern wall) for helical piles application as designed. The bottom of the pits exposed native fractured basalt bedrock and separated rock fragments of boulder size (up to 2-3 feet in diameter). All pits were terminated at the depth of 2-3 feet below the footing, due to full shovel and jack hammer refusal.

It is evident that helical pile installation for the subject residence stabilization is not feasible, due to shallow bedrock geology. As alternative option you should consider to incorporate deep piers versus helical piles sitting on fractured bedrock. Please consider the application of dowels sufficiently embedded into existing concrete footing and undelying bedrock fragments.

We should observe footing excavations prior to forming and pouring concrete to assure that suitable bearing materials have been reached and all our recommendations utilized.

We appreciate the opportunity to assist you on this project. If you have any questions or would like additional information please feel free to contact the undersigned at 503-892-2000.

Truly yours,

Hydro Geo & Environmental, Inc.



expires 10/31/16

Mike Golberg, C.E.G.
Principal Engineering Geologist

.....